

Remarks

Applicant respectfully request reconsideration of this application as amended. Claims 1 and 31 have been amended. No claims have been cancelled. Therefore, claims 1, 3-31 and 33 are presented for examination.

Applicant acknowledges the allowance of claims 11-30

Claims 1, 3-10, 31 and 33 stand rejected under 35 U.S.C. §112, first paragraph, as failing to comply with the written description requirement. Applicant submits that the above rejection has been obviated by amendments to claims 1 and 31.

Claims 1, 3-10, 31 and 33 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Arimilli, U.S. Patent No. 6,629,268 ("Arimilli268") in view of WO 00/52582 ("582") and further in view of Arimilli, U.S. Publication No. 2002/0129211. Applicant submits that the present claims are patentable over any combination Arimilli (6,629,268), Arimilli (2002/0129211) and WO 00/52582.

Arimilli (6,629,268) discloses a method and apparatus for servicing a processing system through a test port allow initialization and fault recovery capability including the ability to coherently access cache memory while the processing system is operating. A JTAG standard interface is used to access registers in a main processing component and has the additional capability to generate internal bus transactions to access registers, cache and memory both within the main processor, and externally by causing a bus interface in the main processor to generate external bus transactions. The service processor can coherently access cache by this mechanism, allowing fault tolerant recovery from operations in which the cache must be coherently flushed in order to maintain proper system operation. See Arimilli 1 at Abstract.

Arimilli (2002/0129211) discloses a data processing system and method of operating a data processing system that arbitrate between conflicting requests to modify data cached in a shared state and that protect ownership of the cache line granted during such arbitration until modification of the data is complete. The data processing system includes a plurality of agents coupled to an interconnect that supports pipelined transactions. While data associated with a target address are cached at a first agent among the plurality of agents in a shared state, the first agent issues a transaction on the interconnect. In response to snooping the transaction, a second agent provides a snoop response indicating that the second agent has a pending conflicting request and a coherency decision point provides a snoop response granting the first agent ownership of the data. In response to the snoop responses, the first agent is provided with a combined response representing a collective response to the transaction of all of the agents that grants the first agent ownership of the data. In response to the combined response, the first agent is permitted to modify the data. See Arimilli 2 at Abstract.

WO 00/52582 discloses a cache protocol having a multiple indication such that a part of the MESI state of a memory and the MESI state of an individual processor and/or another cache are indicated. See WO 00/52582 at claim 1.

Independent claims 1 and 31 of the present application each recite a cache line having a joint cache coherency state with the cache line having a first cache coherency state when accessed from said first interface and a second cache coherency state when accessed from said second interface.

Applicant submits that each of the Arimilli references and WO 00/52582 fail to disclose or suggest *a cache line having a joint cache coherency state*. Therefore, any

combination of the references would also fail to disclose *a cache line having a joint cache coherency state*. As a result claims 1 and 31, and their respective dependent claims, are patentable over a combination of Arimilli (6,629,268), Arimilli (2002/0129211) and WO 00/52582.

Applicant submits that the rejections have been overcome and that the claims are in condition for allowance. Accordingly, applicant respectfully requests the rejections be withdrawn and the claims be allowed.


The Examiner is requested to call the undersigned at (303) 740-1980 if there remains any issue with allowance of the case.

Please charge any shortage to our Deposit Account No. 02-2666.

Respectfully submitted,

BLAKELY, SOKOLOFF, TAYLOR & ZAFMAN LLP

Date: August 20, 2008



Mark L. Watson
Reg. No. 46,322

1279 Oakmead Parkway
Sunnyvale, California 94085-4040
(303) 740-1980